OYUNGSOLAR

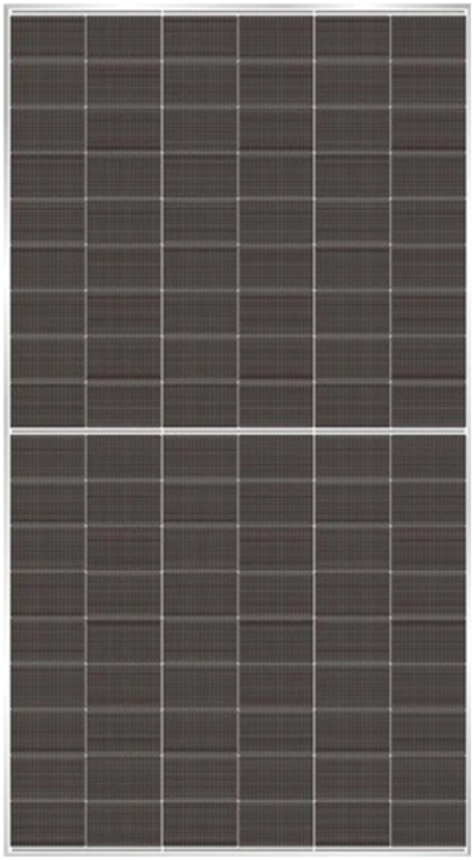
OSM54NHM

500-525 Watt

HALF CELL

N-Type HJT

MONOFACIAL MODULE



Ultra-high Power Output

Power output until the 30th year more than 90.3%.

HJT Technology

Combining gettering process and double-sided µc-Si to improve cell efficiency and module power.

Ultra-low Annual Power Degradation

Annual power degradation less than 0.3%.

No LID, No PID

Better performance and efficiency, ultra-high power generation.

Sealing with PIB

Stronger water resistance, greater air impermeability to extent module lifespan.

Suitable for Solar Rooftop System

Lower BOS cost, lower LCOE.

15years Product Warranty

30years Linear Power Warranty

≤1.0% First-year Degradation

≤0.30% Annual Degradation Over 30 Years

IEC61215:2021 / IEC61730:2023
IEC61701 / IEC62716 / IEC60068 / IEC62804
ISO9001:2015: Quality Management System
ISO14001:2015: Environment Management System
ISO45001:2018: Occupational health and safety management systems

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Mechanical Parameters

Cell Type	N-type HJT
No. of cells	108 (54×2)
Dimension	1960×1134×30mm
Weight	27.40kg
Front Glass	2.0 mm, anti-reflection coating
Back Glass	/
Frame	anodized aluminium alloy
Junction Box	IP68 rated
Protection Class	Class II
IEC Fire Type	Class C
Output Cables	4.0mm^2, (+): 1205mm, or customized length

Packaging Configuration

Pallet Dimentions	/
Packaging Detail	36pcs/pallet, 864pcs/40'HC

Specifications (STC)

Maximum Power (Pmax/W)	500	505	510	515	520	525
Maximum Power Voltage (Vmp/V)	34.16	34.27	34.38	34.49	34.60	34.71
Maximum Power Current (Imp/A)	14.64	14.74	14.84	14.94	15.04	15.14
Open-circuit Voltage (Voc/V)	40.76	40.87	40.98	41.09	41.20	41.31
Short-circuit Current (Isc/A)	15.48	15.59	15.70	15.81	15.92	16.03
Module Efficiency (STC/%)	22.50	22.70	22.90	23.20	23.40	23.60
Power Tolerance	0~3%					
Temperature Coefficients of Pmax	-0.24%/°C					
Temperature Coefficients of Voc	-0.22%/°C					
Temperature Coefficients of Isc	0.04%/°C					

STC: Irradiance 1000W/m^2, Cell Temperature 25°C, AM=1.5

Specifications (NOCT)

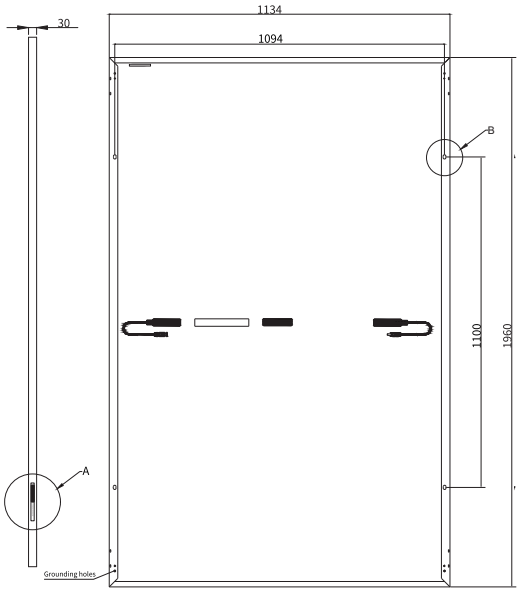
Maximum Power (Pmax/W)	381	385	389	393	397	400
Maximum Power Voltage (Vmp/V)	32.63	32.73	32.83	32.93	33.03	33.13
Maximum Power Current (Imp/A)	11.70	11.78	11.86	11.94	12.02	12.10
Open-circuit Voltage (Voc/V)	38.90	39.01	39.11	39.22	39.32	39.43
Short-circuit Current (Isc/A)	12.37	12.46	12.55	12.64	12.72	12.81

NOCT: Irradiance 1000W/m^2, Ambient Temperature 20°C, AM=1.5, Wind Speed 1m/s

Application Conditions

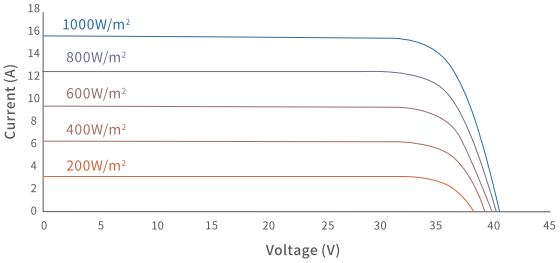
Operating Temperature	-40°C ~ +85°C
Maximum System Voltage	1500 VDC (IEC)
Maximum Series Fuse Rating	30A
Nominal Operating Cell Temperature - NOCT	44±2°C
Bifaciality	/

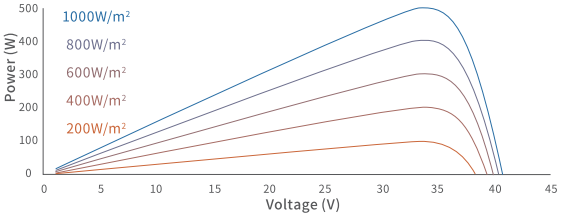
Engineering Drawings



Electrical Performance

I-V Curve (500W)





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